

WHAT IS CLAIMED IS:

1. A cable modem tuner, comprising:
  - a tuner portion taking and amplifying a signal corresponding to a reception channel from input signals, and converting to an intermediate frequency signal;
  - 5 a surface acoustic wave filter connected to an output of said tuner portion;
  - a gain control and intermediate frequency amplifying circuit connected to an output of said surface acoustic wave filter;
  - a lowpass filter connected to an output of said gain control and  
10 intermediate frequency amplifying circuit; and
  - an output circuit connected to an output of said lowpass filter.
2. The cable modem tuner according to claim 1, wherein said output circuit includes an unbalance/balance converting circuit converting unbalanced signals of an output of said lowpass filter to balanced signals.
3. The cable modem tuner according to claim 1, wherein said output circuit includes a differential amplifying circuit providing an output of said lowpass filter as balanced signals.
4. The cable modem tuner according to claim 1, wherein said gain control and intermediate frequency amplifying circuit includes a dual gate type MOSFET amplifying circuit receiving an output of said surface acoustic wave filter.
5. The cable modem tuner according to claim 1, wherein said gain control and intermediate frequency amplifying circuit includes a balanced type dual gate MOSFET amplifying circuit receiving an output of said surface acoustic wave filter.

6. The cable modem tuner according to claim 5, wherein  
said gain control and intermediate frequency amplifying circuit  
includes a differential amplifying circuit receiving an output of said  
balanced type dual gate MOSFET amplifying circuit.